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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/783,581

02/20/2004

Jennifer Q. Trelewicz

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12/09/2004

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EXAMINER

NOLAN JR, CHARLES H

ART UNIT

PAPER NUMBER

2854

DATE MAILED: 12/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/783,581

**Applicant(s)**

TRELEWICZ ET AL.

**Examiner**

Charles H Nolan, Jr.

**Art Unit**

2854

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 20 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-40 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>2-20-04</u> .   | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-6,9-10,12-13,15,19,20,22-24,26-31,33-34 and 38 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Shimada et al. (6,310,637).

With respect to Claims 1,5,28,30, Shimada teaches printing a test pattern on a print medium in figures 16-19, generating a digital image of the printed test pattern by an imaging device(CCD camera) 19 figure 41, analyzing an interference (Moiré) pattern to measure for distortion of the print medium in figures 26,29,31-39,42-43 and column 10, lines 19-37 and calibrating the printing device based on the measure distortion ( varying thickness of print medium) in figures 7,42-43 and column 1, lines 35-38. Further, Shimada teaches the computer code in at least ROM in column 23, lines 17-29 and his claim 19. With respect to Claims 2,20, it is noted that the printing of a test pattern by Shimada is a print job as broadly recited in Claim 2. Further, Shimada teaches the repeated generating, analyzing and calibrating in figure 42 and column 22, lines 30-39.

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With respect to Claim 3, it is noted that the calibration of the printer is done at a later time after printing the test patterns in figure 42 of Shimada. Claim 3 is a temporal claim, but does not give the Examiner a reference time with which to compare. Therefore, the Examiner has broadly interpreted this claim to mean that the calibration is done after the test pattern is printed. With respect to Claim 4, Shimada teaches that the calibration (program) may be done in an external storage device in column 23, lines 10-16. With respect to Claims 6,22,31, Shimada teaches the multi-component inkjet printer on the front page diagram, the reticle test pattern in figure 29, the print medium as paper in column 11, lines 39-40 and the imaging device as a CCD camera in column 22, lines 13-18. It is noted that the limitation of the container is optional because the Examiner selected paper. With respect to Claim 7, Shimada teaches the adjusting of a timing of a firing of a printing station in the Abstract. With respect to Claims 10,24,29,34, it is noted that the printing of a test pattern is a print job as broadly recited. Further, Shimada teaches repeating the calibration method different test patterns in figures 20-23. With respect to Claims 12-13,26-27, Shimada teaches the components are at least black, cyan and magenta in column 11, lines 13-15. With respect to Claims 15,38, Shimada teaches the ink jet printer and the interference pattern caused by a first spot not bleeding onto a second spot on the front page diagrams. With respect to Claim 19, Shimada teaches the printing device in the Abstract, the imaging device 19 coupled to the printing device in figure 41, the means for printing a test pattern in figure 29, the means for generating a digital image in column 22, lines 13-18 (note the CCD camera to CPU conversion), the means for analyzing and calibrating based on measured distortion

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in figures 26,29,31-39,42-43 and column 10, lines 19-37. With respect to Claims 9, 23,33, Shimada teaches the predetermined test pattern, a periodicity of the test pattern and a position on the print medium in figures 16-23. Further, Shimada teaches the means for storing the test pattern, the test pattern periodicity and position of the test pattern prior to printing in column 17, lines 48-67, column 18, lines 1-19 and column 23, lines 1-30.

3. Claims 1-16,18-20,22-39 are rejected under 35 U.S.C. 102(a) as being clearly anticipated by Bildstein et al. to assignee IBM (6,644,773).

With respect to Claim 1, Bildstein teaches the generating, analyzing and calibrating steps in his claim 1. With respect to Claim 2, Bildstein teaches the calibration is performed while continuing to process a print job in his claim 2. With respect to Claim 3, Bildstein teaches the later time in his claim 3. With respect to Claim 4, Bildstein teaches the different location in his claim 4. With respect to Claim 5, Bildstein teaches Moiré pattern in his claim 5. With respect to Claim 6, Bildstein teaches this limitation in his claim 6. With respect to Claims 7-10, Bildstein teaches these limitations in his claims 7-10. With respect to Claims 12-13, Bildstein teaches these limitations in his claim 11. With respect to Claim 14, Bildstein teaches these limitations in his claim 1. With respect to Claim 15, Bildstein teaches these limitations in his claim 13. With respect to Claim 16, Bildstein teaches these limitations in his claim 14. With respect to Claim 18, Bildstein teaches these limitations in his claim 16. With respect to Claim 19, Bildstein teaches these limitations in his claim 20. With respect to Claim 20, Bildstein teaches these

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limitations in his claim 21. With respect to Claim 22, Bildstein teaches these limitations in his claim 23. With respect to Claim 23, Bildstein teaches these limitations in his claim 24. With respect to Claim 24, Bildstein teaches these limitations in his claim 25. With respect to Claims 26-27, Bildstein teaches these limitations in his claim 26. With respect to Claim 28, Bildstein teaches these limitations in his claim 28. With respect to Claim 29, Bildstein teaches these limitations in his claim 2. With respect to Claim 30, Bildstein teaches these limitations in his claim 29. With respect to Claim 31, Bildstein teaches these limitations in his claim 30. With respect to Claim 32, Bildstein teaches these limitations in his claim 31. With respect to Claim 33, Bildstein teaches these limitations in his claim 32. With respect to Claim 34, Bildstein teaches these limitations in his claim 33. With respect to Claims 36-37, Bildstein teaches these limitations in his claim 38. With respect to Claim 38, Bildstein teaches these limitations in his claim 13. With respect to Claim 39, Bildstein teaches these limitations in his claim 35. With respect to Claims 11,25 and 35, Bildstein teaches these limitations in his claim 37.

4. Claims 1-16,18-20 and 22-39 are rejected under 35 U.S.C. 102(e) as being anticipated by Bildstein et al.

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

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With respect to Claim 1, Bildstein teaches the generating, analyzing and calibrating steps in his claim 1. With respect to Claim 2, Bildstein teaches the calibration is performed while continuing to process a print job in his claim 2. With respect to Claim 3, Bildstein teaches the later time in his claim 3. With respect to Claim 4, Bildstein teaches the different location in his claim 4. With respect to Claim 5, Bildstein teaches Moiré pattern in his claim 5. With respect to Claim 6, Bildstein teaches this limitation in his claim 6. With respect to Claims 7-10, Bildstein teaches these limitations in his claims 7-10. With respect to Claims 12-13, Bildstein teaches these limitations in his claim 11. With respect to Claim 14, Bildstein teaches these limitations in his claim 1. With respect to Claim 15, Bildstein teaches these limitations in his claim 13. With respect to Claim 16, Bildstein teaches these limitations in his claim 14. With respect to Claim 18, Bildstein teaches these limitations in his claim 16. With respect to Claim 19, Bildstein teaches these limitations in his claim 20. With respect to Claim 20, Bildstein teaches these limitations in his claim 21. With respect to Claim 22, Bildstein teaches these limitations in his claim 23. With respect to Claim 23, Bildstein teaches these limitations in his claim 24. With respect to Claim 24, Bildstein teaches these limitations in his claim 25. With respect to Claims 26-27, Bildstein teaches these limitations in his claim 26. With respect to Claim 28, Bildstein teaches these limitations in his claim 28. With respect to Claim 29, Bildstein teaches these limitations in his claim 2. With respect to Claim 30, Bildstein teaches these limitations in his claim 29. With respect to Claim 31, Bildstein teaches these limitations in his claim 30. With respect to Claim 32, Bildstein teaches these limitations in his claim 31. With respect to Claim 33, Bildstein teaches these limitations

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in his claim 32. With respect to Claim 34, Bildstein teaches these limitations in his claim 33. With respect to Claims 36-37, Bildstein teaches these limitations in his claim 38. With respect to Claim 38, Bildstein teaches these limitations in his claim 13. With respect to Claim 39, Bildstein teaches these limitations in his claim 35. With respect to Claims 11,25 and 35, Bildstein teaches these limitations in his claim 37.

### ***Claim Objections***

5. Claim 15 and 19 are objected to because of the following informalities: Claim 15 recites "the ink-jet printer" in lines 2 and 3. Perhaps, Applicant meant to recite - - a ink-jet printer - -. Claim 19 recites "present medium" in line 8. Perhaps, Applicant meant to recite - -print medium - -. Appropriate correction is required.

### ***Allowable Subject Matter***

6. Claims 17,21 and 40 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. The following is a statement of reasons for the indication of allowable subject matter: The Examiner reserves comment until the entire application is in condition for allowance.

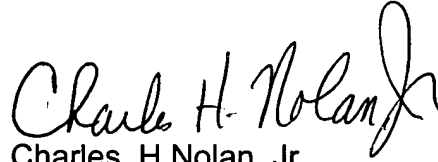
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles H Nolan, Jr. whose telephone number is 571-272-2171. The examiner can normally be reached on Monday through Thursday 8:00 AM to 6:30 PM.



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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Hirshfeld can be reached on 571-272-2168. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Charles H Nolan, Jr.  
Primary Examiner  
Art Unit 2854

CHN